

Section 5.1: Sampling Plans and Experimental

Tuesday, February 26, 2019

4:44 PM

Design

we've now studied probability distributions:

normal distribution - need to know μ and σ
binomial - need to know n and p

these parameters (μ, σ, p) are numbers describing the entire population

but what if we can't or don't want to measure the entire population?

- take a sample

- but how can we estimate the parameters of the population from the statistics of the sample?

sampling plan - the way a sample is selected from the population

→ this method determines the quality of your sample

in this course, we will look at the situation in which there is a population of individuals/objects and we are selecting some of them for measurement

what is the difference between stratified and cluster?

in both, break into groups, measure individuals from group

stratified: measure all groups, some individuals from each group

cluster: measure some groups, all individuals from that group

non-random samples:

- convenience sample

- individuals are chosen because of ease

- call for volunteers

- internet polls